

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number

WO 2005/044183 A3

(51) International Patent Classification⁷: **A61K 39/00**,
AOIN 43/04, A61K 31/70

(21) International Application Number:
PCT/US2004/033178

(22) International Filing Date: 8 October 2004 (08.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/510,057 9 October 2003 (09.10.2003) US

(71) Applicant (for all designated States except US):
TRUSTEES OF BOSTON UNIVERSITY [US/US];
One Sherborn Street, Boston, MA 02215 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WALSH, Kenneth**
[US/US]; 207 Judy Farm Road, Carlisle, MA 01741 (US).
OUCHI, Noriyuki [JP/US]; 44 Washington Street, #204,
Brookline, MA 02445 (US).

(74) Agents: **EISENSTEIN, Ronald, I.** et al; Nixon Peabody
LLP, 100 Summer Street, Boston, MA 02110 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:

16 February 2006

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOSITIONS USING ADIPONECTIN FOR TREATMENT OF CARDIAC DISORDERS! AND
FOR STIMULATION OF ANGIOGENESIS

(57) Abstract: We have surprisingly discovered that adiponectin regulates angiogenesis and have shown that adiponectin is an effective agent at treating cardiac disorders. As a result of this discovery, the present invention provides methods for treatment of cardiac disorders and methods for stimulation of angiogenesis in tissues using adiponectin. In one preferred embodiment, the methods of the invention are used to treat complications of diabetes, such as ischemic limbs and hypertrophic cardiomyopathy.

WO 2005/044183 A3